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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,084	03/08/2001	Thomas P. Glenn	G0049	8517

7590 11/25/2003

EXAMINER
WILLIAMS, ALEXANDER O

ART UNIT	PAPER NUMBER
2826	

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DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/803,084	GLENN ET AL	
	Examin r	Art Unit	
	Alexander O Williams	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence addr ss --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,23-25 and 30-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,23-25 and 30-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *9/2/03* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Serial Number: 09/803084 Attorney's Docket #: G0049
Filing Date: 3/8/2001;

Applicant: Glenn et al.

Examiner: Alexander Williams

Applicant's Amendment has been acknowledged.

This application contains claims 16 to 22 and 26 to 29 drawn to an invention non-elected without traverse in Paper No. 7.

The disclosure is objected to because of the following informalities: Applicant's related application information should be updated.

Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 to 15, 23 to 25 and 30 to 41 are rejected under 35 U.S.C. § 102(b) as being anticipated by Roberts, Jr. et al. (U.S. Patent # 5,362,681).
1. Roberts, Jr. et al. (figures 1a to 10) specifically figures 1A and 6 show a wafer **10** comprising: a first surface **(top of 10)**; a second surface **(bottom of 10)**; a first scribe line **12** coupled to said first surface, said first scribe line extending in a first direction; a second scribe line **12** coupled to said first surface, said second scribe line extending in a second direction perpendicular to said first direction; and a first alignment mark **(50)** formed at an intersection of said first scribe line and said second scribe line, said first alignment mark extending from said first surface to said second surface.
2. The wafer of Claim 1, Roberts, Jr. et al. further comprising a scribe grid **(intersection of 12s)** comprising said first scribe line and said second scribe line.
3. The wafer of Claim 2, Roberts, Jr. et al. further comprising electronic components **14** delineated by said scribe grid.
4. The wafer of Claim 3, Roberts, Jr. et al.'s electronic components **14** are selected from the group consisting of integrated circuits, micromachine chips and image sensor chips.
5. The wafer of Claim 3, Roberts, Jr. et al.'s electronic components **14** comprise bond pads coupled to said first surface (inherit).
6. The wafer of Claim 3, Roberts, Jr. et al.'s electronic components **14** comprise active areas coupled to said first surface (inherit).
7. The wafer of Claim 1, Roberts, Jr. et al. further comprising a flat extending in said second direction.
8. The wafer of Claim 1, Roberts, Jr. et al.'s first scribe line delineates a first electronic component **155** from a second electronic component.
9. The wafer of Claim 8, Roberts, Jr. et al.'s second scribe line delineates said second electronic component **155** from a third electronic component **14**.
10. The wafer of Claim 1, Roberts, Jr. et al.'s first alignment mark is an aperture **(see figure 1A)**.
11. The wafer of Claim 1, Roberts, Jr. et al. further comprising a first plurality of alignment marks **(intersection of 12s)** comprising said first alignment mark, said first plurality of alignment marks extending from said first surface to said second surface.
12. The wafer of Claim 11, Roberts, Jr. et al.'s first plurality of alignment marks **12** are aligned with said first scribe line.

13. The wafer of Claim 12, Roberts, Jr. et al. further comprising a second plurality of alignment marks **50** aligned with a third scribe line coupled to said first surface and extending in said second direction.
14. The wafer of Claim 11, Roberts, Jr. et al.'s first plurality of alignment marks **50** define a first line, said first line being aligned with said first scribe line.
15. The wafer of Claim 14, Roberts, Jr. et al. further comprising a second plurality of alignment marks **50** defining a second line, said second line being aligned with a third scribe line coupled to said first surface and extending in said second direction.

23. Roberts, Jr. et al. (figures 1a to 10) specifically figures 1A and 6 show a wafer **10** comprising: a first surface **(top of 10)**; a second surface **(bottom of 10)**; a scribe grid **(intersection of 12s)** coupled to said first surface; and a plurality of alignment marks **(intersection of 12s at 50)** extending from said first surface to said second surface, said plurality of alignment marks having a positional relationship to said scribe grid.
24. The wafer of Claim 23, Roberts, Jr. et al.'s scribe grid comprises a horizontal scribe line, a first set of said plurality of alignment marks being aligned with said horizontal scribe line.
25. The wafer of Claim 24, Roberts, Jr. et al.'s scribe grid comprises a vertical scribe line, a second set of said plurality of alignment marks being aligned with said vertical scribe line.
32. The wafer of Claim 23, Roberts, Jr. et al. further comprising electronic components delineated by said scribe grid.
33. The wafer of Claim 32, Roberts, Jr. et al.'s electronic components **14** are selected from the group consisting of integrated circuits, micromachine chips and image sensor chips.
34. The wafer of Claim 32, Roberts, Jr. et al.'s electronic components **14** comprise bond pads coupled to said first surface (inherit).
35. The wafer of Claim 32, Roberts, Jr. et al.'s electronic components **14** comprise active areas coupled to said first surface (inherit).
36. The wafer of Claim 25, Roberts, Jr. et al.'s vertical scribe line extends in a first direction and wherein said horizontal scribe line extends in a second direction, said wafer further comprising a flat extending in said second direction.

37. Roberts, Jr. et al. (figures 1a to 10) specifically figures 1A and 6 show a wafer **10** comprising: a front-side surface **(top surface of 10)**; a back-side surface **(bottom surface of 10)**; a first scribe line **(intersection of 12s)** coupled to said front-side surface; and a first back-side alignment mark (at 50) extending from said front-side surface to said back-side surface, said first backside alignment mark being formed along said first scribe line **(see figure 1A)**.
38. The wafer of Claim 37, Roberts, Jr. et al. further comprising a plurality of back-side alignment marks extending from said front-side surface to said back-side surface, said plurality of back-side alignment marks comprising said first back-side alignment mark.

39. The wafer of Claim 38, Walker et al. plurality of back-side alignment marks have a positional relationship to said first scribe line.
40. Roberts, Jr. et al. (figures 1a to 10) specifically figures 1A and 6 show a wafer **115** comprising: a first surface **(top surface of 10)**; a second surface **(bottom surface of 10)**; a scribe line **(intersection of 12s)** coupled to said first surface; and a means **(intersection of 12s and at 50)** for determining a position of said scribe line from said second surface, said means for determining extending through said wafer from said first surface to said second surface.

Initially, and with respect to claims 2 and 23, note that a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); In re Fitzgerald, 205 USPQ 594, 596 (CCPA); In re Marosi et al., 218 USPQ 289 (CAFC); and most recently, In re Thorpe et al., 227 USPQ 964 (CAFC, 1985) all of which make it clear that it is the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that Applicant has burden of proof in such cases as the above case law makes clear.

Claims 30 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Roberts, Jr. et al. (U.S. Patent # 5,362,681).

30.The wafer of Claim 2, Roberts, Jr. et al.'s scribe grid comprises an etched silicon oxide layer.
31. The wafer of Claim 23, Roberts, Jr. et al.'s scribe grid, comprises an etched silicon oxide layer.

As to the grounds of rejection under section 103, see MPEP § 2113.

Response

Applicant's arguments filed 9/10/03 have been fully considered, but are moot in view of the new grounds of rejections detailed above.

The following references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/797,620,618,226,59,72,644,650	6/29/03 11/19/03
Other Documentation: foreign patents and literature in 257/797,620,618,226,59,72,644,650	6/29/03 11/19/03
Electronic data base(s): U.S. Patents EAST	6/29/03 11/19/03

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to Technology Center 2800 via the Technology Center 2800 Fax center located in Crystal Plaza 4-5B15. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center 2800 Fax Center number is (703) 308-7722 or 24. Only Papers related to Technology Center 2800 APPLICATIONS SHOULD BE FAXED to the GROUP 2800 FAX CENTER.

Any inquiry concerning this communication or any earlier communication from the examiner should be directed to ***Examiner Alexander Williams*** whose telephone number is **(703) 308-4863**.

Any inquiry of a general nature or relating to the status of this application should be directed to the ***Technology Center 2800 receptionist*** whose telephone number is **(703) 308-0956**.

11/19/03

Primary Patent Examiner
Alexander O. Williams